METHOD AND APPARATUS FOR PROGRAMMING SOFTWARE COMPONENTS

Abstract of the Disclosure

A method and apparatus are disclosed for programming software components that treats software components as the basic unit of abstraction and computation. A software component is encapsulated and classes and other program entities, such as data fields and methods, within a given component do not exist beyond a component boundary. A component interacts with other components only by means of a defined set of input and output ports. A component can inherit and implement ports declared in a template and can declare and implement new ports. A component can only access the external environment through its output ports. An output port of one component can only be connected to a conforming input port of another component. A connect statement is an explicit plumbing operation for connecting components together. Interactions between components are loosely coupled. A related set of templates can be grouped together to form a group. Groups are useful for implementing implicit invocation and multicasting.

1500-223.APP

FI9-92-059